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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,763	06/27/2003	Morito Morishima	P 0304562/H7649US	7410

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EXAMINER

PHAM, VAN T

ART UNIT PAPER NUMBER

2627

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/607,763	Applicant(s) MORISHIMA, MORITO	
	Examiner VAN T. PHAM	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Group I, in the reply filed on 6/02/2006 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 8-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the stored temperature" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the position of a diameter direction " in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the changing rate " and "the light receiving level" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al (US 6,818,591) in view of Ueno Ichiro (JP 03-219428).

Regarding claim 1, Arai discloses an optical disc recording apparatus, comprising: a light irradiator that irradiates a laser light onto an optical disc having a discoloration layer (see Fig. 1, layer 4); a position controller that controls an irradiating position of the laser light (see Fig. 3); a laser power controller (inherently), and a temperature detector that detects a temperature of the optical disc (inherently; noted that a recording layer has a thermo sensitive recording layer is reversibly changed in its color by heat and photo-thermo conversion layer which absorbs light with generating heat (see Fig. 1 and col. 4), therefore the temperature of the disc has to get detected and see Fig. 4). However, Arai does not disclose a laser power corrector that corrects laser power for discoloration the discoloration layer by the laser light in accordance with the detected temperature in order to cancel a change in a temperature of the optical disc.

Ueno Ichiro, see abstract discloses an optical disc recording apparatus, comprising: a light irradiator that irradiates a laser light onto an optical disc; a laser power controller (inherently) that controls a laser power of the laser light in accordance with input image data; a temperature detector that detects a temperature of the optical disc; and a laser power corrector that corrects laser power by the laser light in accordance with the detected temperature in order to cancel a change in a temperature of the optical disc.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a temperature detector that detects a temperature of the optical disc and a laser power corrector that corrects laser power in Arai as suggested by Ueno (note: by doing so the laser power corrector that corrects laser power for discoloration in the discoloration layer by the laser light in accordance with the detected temperature, the motivation being in order to recording of specific bit size at all times (see Ueno abstract).

Regarding claim 3, see rejection above of claim 1 and see for a light receiver that receives a reflected light of the laser light reflected by the optical disc and outputs a light receiving signal representing a light receiving level (see cols. 5-6 and Fig. 4); and a laser power corrector that corrects laser power to maintain a changing rate of the light receiving level to be a changing rate with in a range determined in advance when the laser light at a laser power for discolorating the discoloration layer in accordance with the input image data (see Arai Figs. 1-4 and Ueno abstract).

Regarding claim 5, the combination of Arai and Ueno, discloses the optical disc recording apparatus according to claim 1, wherein the temperature detected by the temperature detector is compared to a previously input temperature (see Arai Fig. 4 there are difference of temperature $T1'-T4'$ and cols. 13-14, also there is a temperature detector in Ueno which the temperature are varies too, so it has to compare those temperature of the disk).

Regarding claim 6, the combination of Arai and Ueno, discloses the optical disc recording apparatus according to claim 1, wherein the laser power controller terminates laser power correction when the obtained temperature is equal to the stored temperature (see Figs. 1-4) (noted: due to the 112 rejection above the claim is not understood).

Regarding claim 8, the combination of Arai and Ueno, discloses the optical disc recording apparatus according to claim 1, wherein a linear velocity of the optical disc is controlled based on the position of a diameter direction of a laser light radiating position (see Figs. 1-4) (noted: due to the 112 rejection above the claim is not understood).

Regarding claim 9, the combination of Arai and Ueno, discloses the optical disc recording apparatus according to claim 1, wherein a linear velocity of the optical disc is

controlled based on the changing rate of the light receiving level (see col. 6 and Figs. 3-4) (noted: due to the 112 rejection above the claim is not understood).

Allowable Subject Matter

6. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 7 is allowable over prior art of record since it does not disclose or suggest all of the limitations of claim 1 as well as the limitation that **the laser power controller calculates a laser power correction amount base on the detected temperature and a previously input temperature.**

Cited References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to Reversible thermosensitive recording medium, label, and image forming and erasing method Arai et al (US 6,818,591).


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am –6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER